

The Rationale for Addressing Oregon’s Regulatory Process For Electric Transmission Siting

“How Can Oregon Improve its Transmission Siting Process ”

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Introduction

Nationwide, new construction to increase electrical energy transmission has lagged over the past 25 years, while the demand for energy has continued to increase. The 2009 Report Card by the American Society of Civil Engineers notes that, “The transmission and distribution system [of the United States] has become congested because growth in electricity demand and investment in new generation facilities have not been matched by investment in new transmission facilities¹” (brackets added). Regionally, a number of studies indicate that the electric transmission system in the western United States is inadequate to meet future energy demands and load allocations.² Partly, this is a function of a lack of capacity in the existing electric transmission grid, and partly this is due to the anticipated development, and diversity, of renewable energy generated from a variety of remote (and new) sources and suppliers.

Energy generation from renewable sources (geothermal, wind, solar, wave, biomass) is increasing the need to expand transmission capacity. Since many of these renewable energy sources are located in remote areas far away from the existing transmission grid—and are often located away from high-use, urban and industrial areas where demand is greatest—pressure to develop new transmission facilities is mounting.

The following paper provides a brief overview of Oregon and the region’s energy and transmission needs and policies. The paper concludes with suggestions for focusing the Energy Planning Council’s work on reviewing the regulatory framework for siting energy transmission in Oregon, identifying and prioritizing the primary issues associated with regulation of transmission siting, and making recommendations on ways to improve transmission siting regulations in Oregon.

History and Status of Oregon’s Energy and Transmission Needs

Recent History of Siting Transmission Lines

Between 1977, and 2008, Oregon’s Legislature passed a number of statutes that created incentives for renewable energy sources and conservation. For instance, the Oregon Energy Conservation and Production Act of 1977 called for developing cost-effective

¹ http://www.infrastructurereportcard.org/sites/default/files/RC2009_full_report.pdf pg. 134

² “FERC Requests Comments Concerning Transmission Planning Processes and Cost Allocations, Snarr & Thatcher, Holland & Hart, Oct. 2009; Texas State Energy Conservation Office, http://www.seco.cpa.state.tx.us/re_wind-transmission.htm; National Wind Watch, <http://www.wind-watch.org/news/2009/01/11>

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energy sources (including renewable sources) and maximizing state conservation efforts. Other state Acts created priorities for developing alternative, renewable sources of energy from methane, ethanol, solar electric, geothermal, biomass and wind. Yet the Legislature did not specifically address the need to develop additional transmission capacity in order to carry energy from these renewable sources to high-use, urban and industrial centers. Consequently, Oregon is facing a growing fissure between the development of new energy sources, and the ability to transmit that energy to users around the state.

A review of a few selected media reports, from regional and national newspapers over the past 30 years, underscores the challenges that siting new transmission lines has encountered in Oregon during that time.

- In 1977 Pacific Power and Light proposed a 500K-volt, 470-mile long power line from Midpoint, Idaho to a substation near Medford, Oregon. The siting process was challenged by environmentalists concerned about damage to wildlife refuges, (*The Register-Guard*, October 24th, 1977)
- In 1990, Pacific Power & Light agreed to delay construction of a new transmission line between Medford and Eugene while a review committee studied the potential health effects. The panel's conclusion was that more research was needed. (*USA Today*, March 15th, 1990)
- In 2009, Oregon Senator Ted Ferrioli (R-John Day) introduced Senate Bill 644 to prohibit siting of power transmission lines with a capacity of 400,000 volts or greater on land zoned for exclusive farm use. (Baker County press release, March 5th, 2009)

Currently, Oregon faces a growing schism between its lack of capacity to move energy from renewable sources, while current legislation, tax policies, and public demand are creating incentives and pressure to develop these renewable energy sources.

Oregon's Current Siting Regulatory Process

EFSC's Role and Authority

Historically, authority for siting transmission facilities has resided with individual states. To help address the plethora of issues associated with siting transmission facilities (e.g. land use impacts, property value concerns, technical considerations, jurisdictional disputes, need, view shed and aesthetic concerns, and impacts, to name a few) Oregon created The Energy Facility Siting Council, or "EFSC," in 1975 to help ensure adequate energy and to maintain a balance with environmental concerns and public safety. The EFSC is a "one-stop shop" for transmission facility developers within the State.

According to The Energy Facility Siting Council (EFSC) website³, the EFSC is responsible for overseeing the development of electric transmission lines that are equal to, or greater than, 230 kV, longer than 10 miles in length, and routed across more than

³ <http://www.oregon.gov/ENERGY/SITING/process.shtml>
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one political subdivision in Oregon. Proposed facilities must undergo a review and meet the EFSC's standards to receive a "site certificate." The siting standards ensure that the construction, operation and retirement of a facility are managed to protect the public interest and conserve the state's natural resources. A seven-member Board maintains regulatory authority over the construction and operation of a facility after certification, and evaluates amendments to energy facility siting certificates (ORS 469.470; OAR 345).

An energy facility developer of a transmission line that meets the voltage, length and jurisdictional criteria for EFSC involvement must apply to the EFSC for a site certificate. EFSC follows Oregon's [energy facility siting statutes](#)⁴ (ORS 469.300+) and Administrative Rules (Chapter 345 Oregon Administrative Rules) when reviewing and authorizing a site certificate: These statutes specify:

- The use of [specific standards](#) for determining compliance;
- A "one-stop" process in which the Council determines compliance with specific standards of the Council and other state and local permitting agencies;
- Public comment periods at the front end of the process, followed by a more formal contested case proceeding;
- Appeals on the EFSC's rulings are made directly to the Supreme Court.

The EFSC's decision is binding on all state and local agencies whose permits are addressed in the EFSC review. These agencies must issue the necessary permits and licenses, subject only to the conditions adopted by the EFSC. The Council's decision does not apply to federally delegated permits. A site certificate issued by the EFSC is a comprehensive permit incorporating all applicable requirements of state and local agencies.

Local Jurisdictions' Roles/authority

A Site Certificate from the EFSC preempts all other Oregon law and "shall bind the state and all counties and cities and political subdivisions in this state as to the approval of the site and the construction and operation of the facility." [ORS 469.401\(3\)](#). Local concerns and standards are taken into consideration by the EFSC during its determination process. Transmission facilities applicants do have some flexibility in this process with the ability to choose whether to have the local authority or the EFSC make a decision regarding compliance with local land use policies. If the applicant chooses the local authority, the EFSC will not rule on a certificate unless the local authority approves the land use. If the applicant chooses the EFSC, the Council will gather all relevant land use law from the affected counties when making its decision.⁵

Regional Siting Processes

Regional efforts are underway that are designed to facilitate development of transmission facilities in the Pacific Northwest and California. For instance, in 2009 the Western

⁴ ORS 469.300

⁵ <http://www.westgov.org/wieb/transmission/state-province/Oregon.pdf>

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Electrical Coordinating Council—one of eight regional bodies designated nationally to help improve the nation’s bulk power system (and a member of the North American Electric Reliability Corporation)—received \$14.5 million in funding from *The America Recovery and Reinvestment Act* (ARRA) to obtain assistance from the federal Department of Energy for developing “interconnection-based transmission plans.”

WECC will conduct interconnection-wide electric transmission planning studies in the Western Interconnection with these funds.⁶ The funding will be used to “expand existing regional transmission planning activities and broaden stakeholder involvement in planning processes.” In addition, WECC has formed the *Transmission Expansion Planning Policy Committee* (TEPPC) to assess and help plan for expansion of the West-wide commercial transmission system. TEPPC will also help coordinate and provide information to other subregional planning efforts.

The Northern Tier Transmission Group is another regional group that is working on transmission capacity and use issues. The NTTG is composed of transmission providers and customers in the region that, “... are actively involved in the sale and purchase of transmission capacity of the power grid that delivers electricity to customers in the Northwest and Mountain States. Transmission owners serving this territory work in conjunction with state governments, customers, and other stakeholders to improve the operations of and chart the future for the grid that links all of these service territories.”⁷

Additionally, ColumbiaGrid, formed in 2006, is a non-profit organization composed of regional (BPA), county and city energy suppliers. The organization was created to improve “the operational efficiency, reliability, and planned expansion of the Pacific Northwest transmission grid.”⁸ ColumbiaGrid publishes a biennial transmission plan and transmission system assessment.

The Northwest Power and Conservation Council has published a series of five-year plans that provide “a strategy to meet future demand for electricity in a manner that assures an adequate, economic, affordable, and reliable power supply....”⁹ The latest plan includes a chapter on transmission issues, with an overview of the regional efforts to increase transmission capacity and efficiency in the region.

Transmission and Distribution Needs Over the Next 20 Years

Forecasts of future energy demands in Oregon over the next 20 years range from an increase of as much as 45 percent over current demands (by Portland General Electric for

⁶ <http://www.wecc.biz/Planning/TransmissionExpansion/Pages/default.aspx>

⁷ http://nttg.biz/site/index.php?option=com_frontpage&Itemid=1

⁸ <http://www.columbiagrid.org/default.cfm>

⁹ <http://www.nwcouncil.org/energy/powerplan/6/default.htm>

the Metro area), to approximately a 30 percent increase over current demand by the Northwest Power and Conservation Council. While the rate of demand is variable from different sources, there is agreement that demand for energy will increase in the region. Demand is expected to increase for a variety of reasons, including the growth in home electronics, the development of electric vehicles, and in some areas, the expansion of health care facilities for the elderly.

Regulatory, Political and Economic Barriers to Siting New Transmission Corridors

In the last century, the transmission grid has been largely financed, planned and developed by privately owned, vertically integrated utility companies. The priority of these companies has been to site transmission lines for local utility systems, or for local utilities to connect to neighboring utilities.

One consequence of this practice is that local jurisdictions may oppose siting new transmission lines across their jurisdictions unless these lines directly benefit their communities. Indeed, the decision by a state or a local jurisdiction to approve a new transmission corridor may be tied to whether the new transmission line will directly benefit the local community.

However, with the current emphasis on developing renewable energy sources around the state and region, demand will increase for transmission facilities to move energy generated from these resource-rich, remote areas of Oregon where wind, solar, geothermal and other renewable energy sources are located to the state's high-density urban areas. The disconnect between the increased energy demands and the need for new transmission facilities is exacerbated by a lack of coordination and consideration of cumulative impacts between the development of renewable energy sources and the siting of new transmission corridors within the State.

Federal Authority

Prior to 2005, state utility officials had sole authority for siting transmission facilities. However, with the passage of the Energy Policy Act of 2005, the federal government assumed the overriding authority over transmission line siting decisions in certain circumstances. The Act specifically gives the federal Department of Energy the authority to designate *any* geographic area experiencing electric energy transmission capacity constraints or electrical energy “congestion” that adversely affects consumers, as a “national interest electric transmission corridor,” or “NIETC.” However, the 2005 Act is under appeal in federal courts, so a final ruling on the federal government’s authority under the Act has yet to be determined. Additionally, Federal environmental laws include review processes that create obstacles to siting new transmission lines and corridors: the federal National Environmental Policy Act, the Endangered Species Act, and the Migratory Bird Treaty Act all have review processes that are subject to citizen review and litigation and can influence transmission facility siting. The 2005 Energy Policy Act does include provisions to streamline the siting process across federal lands, including BLM and US Forest Service lands, both of which manage millions of acres in

Oregon. Should the federal Act prevail in Court, these provisions may help achieve a more “streamlined” siting process in the future.

State Authority

At the state level, The Oregon Energy Facility Siting Council issues a *Site Certificate* for large capacity transmission facilities that are longer than 10 miles in length and routed across more than one political subdivision in the state. Lines that are greater than 230 kV, but less than 10 miles in length require a public hearing process but no permit or license is issued. (See “EFSC’s Role and Authority” above).

Focus of EPC Meetings in 2010

As the overview above indicates, identifying ways to help improve Oregon’s transmission siting process are needed. Additionally, a review of the regulatory and infrastructure issues, and the challenges associated with energy transmission, is needed. Consequently, the following suggestions are made to help focus the EPC’s work in the coming year.

1. Identify the major regulatory issues associated with the transmission of energy sources in Oregon. For instance, the EPC could:

- Identify and evaluate regulatory or policy changes that will reduce barriers to transmission projects in Oregon.
- Discuss current transmission-related research and development and future efforts needed to help resolve transmission barriers within the State and region.

2. Help address how siting of new transmission facilities may affect a number of variables, such as:

- View sheds in the State.
- “cumulative impacts” of siting and distribution of new transmission of energy
- State and county roles
- EFSC improvements

3. Recommend ways to improve the regulatory (and infrastructure) process for transmission of energy resources in Oregon

4. Capture the above work in a “white paper” for distribution to Governor Kulongoski and his successor. This paper would serve as a framework and guidance for future energy transmission siting policy and possible legislative consideration.